United States Environmental Protection Agency
EPA New England
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April 14, 2003

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Mayor Hathaway, City of Pittsfield
Commissioner of Public Works and Utilities, City of Pittsfield
Public Information Repositories

RE: March 2003 Monthly Report
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site

Enclosed please find the March 2003 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,

Dean Tagliaferro
1.5 Mile Reach Removal Action Project Manager

1. Overview

During March 2003, EPA, the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc. and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included soil and sediment excavation activities in Cells 8, 8A, 9 and 10 and the backfilling of the riverbanks and riverbed in Cells 5A, 8, 8A and 9. Installation of the Silver Lake outfall extension structure was completed. In addition, a transfer of TSCA and non-TSCA materials from the stockpile management areas and/or excavation cells to the GE On Plant Consolidation Areas (OPCAs) was performed.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the sheetpile cells and their respective locations.

By the end of February 2003, backfill activities were completed in the Cell 5A riverbed and the construction of the Silver Lake Extension structure was started. During the first week of March backfilling activities were completed in the Cell 5A riverbed and riverbank except around the cast-in-place concrete. Common fill, Filter Layer A and 9-inch riprap were placed on the riverbed and common fill, Filter Layer A, Filter Layer B and 18-inch riprap were placed on the riverbank. The construction of the Silver Lake outfall extension structure continued, including setting of forms and rebar for the cast-in-place concrete, and pouring of the base slab and walls of this section of the outfall. The required concrete tests on the walls of the structure were completed.

Also, by the end of February 2003, Cell 8 was divided into sub-cells 8 and 8A. In Cell 8, excavation of non-TSCA materials was initiated, as well as dewatering of Cell 8A. During the first week in March, the non-TSCA material excavation efforts in Cell 8 were completed. There was no TSCA material in Cell 8. The non-TSCA material was transported to the Building 65 and/or Building 68 stockpile management areas (see Table 1 for a daily summary of material transported to the stockpile management areas in the month of March).

The Cell 8 post-excavation verification survey was completed, approved backfill grades were staked out by the surveyors and backfill activities in the riverbed were initiated by placement of common fill, Filter Layer A and 12-inch riprap and a section of about 25 feet of 9-inch riprap.

Dewatering of Cell 8A was continued by pumping water greater than 6 inches in depth directly back to the river. Once the water depth reached 6 inches it was pumped to the water treatment system. The Cell 8A TSCA and non-TSCA excavation depths and limits were established. Excavation and transport of TSCA and non-TSCA materials was completed in Cell 8A (see Table 2 for a summary of the quantities of sediment and soils excavated to date). The non-TSCA material was transported to the Building 65 and/or Building 68 stockpile management areas. Some of the TSCA material was transported directly to Building 71 OPCA, and the remainder

was transported to the Building 63 stockpile management area. Following excavation, excavation verification survey was performed.

During the second week of March, the construction of the Silver Lake outfall extension structure was completed, including construction of forms and setting of rebar for the cast-in-place concrete, cutting of the Silver Lake outfall pipe and pouring of the concrete for the top slab and angle nose. Also, the joints between the pre-cast concrete sections were grouted and backfilling around the box structure with common fill was started.

Upon approval of the final backfill grades in the riverbed and the riverbanks, Cell 5A was flooded by removing two sections of sheetpile wall and removing the Silver Lake outfall inflatable plug.

Cell 8 riverbed and riverbank backfill activities were completed. In the riverbed, common fill, Filter Layer A, 9-inch and 12-inch rip rap, habitat enhancement structures (2-foot boulders), and one rock spur were placed and a wing deflector was constructed according to the project specifications. The riverbanks were backfilled with common fill, Filter Layer A, Filter Layer B and 18-inch riprap. Once the backfill grades were verified and approved, Cell 8 was flooded.

The backfill grades were set for Cell 8A and backfill activities were initiated. In the riverbed, placement of common fill, Filter Layer A, 12-inch riprap, habitat enhancement structures (2-foot boulders) and three rock spurs was completed, and the wing deflector was built per project specifications. On the riverbanks, installation of common fill, Filter Layer A, Filter Layer B and 18-inch riprap was completed. Following completion of backfilling, water was pumped over the sheetpile wall back to the river until the final survey was completed. Upon approval of backfill grades the Cell 8A was flooded.

Other activities during the second week of March included installation of the centerline sheetpile wall between Cells 9 and 10 and installation of the Cell 9 downstream cutoff wall. Cell 9 was constructed to be 100 feet shorter in length than planned due to obstructions encountered in the riverbed during sheetpile installation. The section of the river that was to be part of Cell 9 will become part of Cell 12.

Dewatering of Cell 9 was initiated by pumping water greater than 6 inches in depth directly back to the river. Once the water depth reached 6 inches it was pumped to the water treatment system. Sumps and swales were installed to help in the dewatering process. The Cell 9 TSCA excavation depths and limits were established. Excavation and transport of TSCA materials was then started in Cell 9. The TSCA material was transported to the Building 63 stockpile management area.

During the third week of March, the TSCA excavation activities in Cell 9 were continued and finished. The surveyors marked out the non-TSCA material excavation limits, and the excavation of the non-TSCA materials was completed. The non-TSCA material was transported to the Building 65 and/or Building 68 stockpile management areas. The TSCA material was transported to the Building 63 stockpile management area. Following excavation, the excavation verification survey was performed and backfill limits were staked out. Backfilling of the riverbed and riverbank up to an elevation 975 in Cell 9 was completed. The riverbed was backfilled with common fill, Filter Layer A, and 12-inch riprap and the riverbank with Filter

Layer A, Filter Layer B and 18-inch riprap. In the upstream end of Cell 9 due to the steep grade of the riverbank, 18-inch riprap was placed to the very top of the bank. At the downstream end of Cell 9 the riverbank was less steep and the riprap was placed to elevation 975, common fill was placed from elevation 975 to the top of the bank. The topsoil materials will be backfilled at a later date. Once the backfilling was completed, water from the cell was pumped over the sheetpile wall directly back to the river. Upon completion and approval of the final verification survey, Cell 9 was flooded.

Also, during the third week of March, the surveyors completed laying out the TSCA excavation limits in Cell 10 riverbank and the topographic survey in Cell 12. The Cell 5A upstream and downstream cutoff walls were removed as well as the downstream walls for Cells 8 and 8A. The Cell 9 downstream cutoff wall was driven to mudline, allowing the river water to flow through the west side of the river channel.

During the fourth and the fifth week of March, the installation of the Cell 10 centerline was completed. Cell 10 was isolated by pulling the upstream sheetpile wall up and by installing a downstream cutoff wall. Dewatering of Cell 10 started by pumping water greater than 6 inches in depth directly back to the river. Once the water depth reached 6 inches it was pumped to the water treatment system. Sumps and swales were installed in the cell to assist the dewatering process.

In addition, large concrete pieces from the Cell 10 riverbanks were broken up into pieces less then four feet in any dimension. The concrete pieces were left on the banks to be later removed as part of Cell 10 riverbank excavation. Subsequently, the concrete materials on the Lyman Street parking lot staging area were also broken up to allow for transport to the OPCAs.

The surveyors established the non-TSCA excavation limits in Cell 10. Excavation activities in Cell 10 were initiated. The non-TSCA material was transported to the Building 65 and/or Building 68 stockpile management areas. The TSCA material was transported to the Building 63 stockpile management area. Following excavation, an excavation verification survey was performed.

On Saturday March 29, Cell 10 was temporarily flooded due to high river flows. By Monday March 31, the river levels dropped below the containment walls and the cell was again dewatered. Material that eroded from the riverbanks into the cell during the flood was removed. In addition the remainder of the cell was excavated to the required depths. The post-excavation surveying was performed to confirm that the required excavation depths were achieved.

Installation of 18-inch riprap around the Silver Lake box culvert extension structure was completed. Installation of the Cells 11 and 12 centerline sheetpile wall was continued. Removal of the centerline sheetpile wall between Cells 7 and 8 was initiated.

During the month of March, the water treatment system treated water from Cells 5A, 8, 8A, 9, and 10. Sampling of the water treatment system for parameters included in the NPDES exclusion permit was performed on March 27, 2003. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring was performed on a daily basis. The monthly PCB air monitoring event was performed on March 28, 2003. Surface water sampling

for total suspended solids (TSS) and PCBs was performed on March 5 and March 19, 2003. Additional surface water sampling for total suspended solids (TSS) and PCBs was performed on March 27, 2003 during high river flow conditions while excavation activities were ongoing in Cell 10. Sampling of common fill for chemical parameters was performed on March 6, 2003; sampling for Filter Layer A for chemical parameters was performed on March 6, 2003; and topsoil sampling for chemical parameters was performed on March 10, 2003.

Geotechnical samples were collected for common fill, Filter Layer A, Filter Layer B, topsoil, and 9-inch, 12-inch and 18-inch riprap. Visual inspections of the 9-inch, 12-inch and 18-inch riprap were performed. The results of the geotechnical testing and the visual inspections are not included in the monthly reports but are contained in other submittals and are available upon request.

Stockpile management area activities continued throughout the month of March. Daily inspections, operation and maintenance activities were performed within Buildings 63, 65 and 68. This included the collection of accumulated water that drained from the stockpiles and transportation of that water to the on-site water treatment system. Decontamination of equipment was conducted prior to moving it between TSCA and non-TSCA staging areas.

The transfer of TSCA materials from the Building 63 stockpile management area and the Cell 8A excavation to the Building 71 OPCA was performed from March 3 to March 10, 2003. The non-TSCA materials from the Building 65 and Building 68 stockpile management areas were transported to the Hill 78 OPCA from March 11 to March 14, 2003. Paint filter tests were collected at a frequency of 1 per 100 cubic yards (cy) of material loaded (see Table 3 for a summary of material transported to the OPCAs in March 2003 and Table 4 for a summary of material transported to the OPCAs for the project through March 2003).

Traffic control was conducted on Lyman Street throughout the month of March.

The March 29 high river flow (approximately 2,100 cfs) caused some of the newly restored riverbanks to erode. The existing silt fences located at the top of the riprap contained most of the eroded material. The contained material was removed, the riverbanks were regarded and the silt fences were repaired as necessary.

The initial conditions monitoring survey of two buildings (the Laundromat and the self car wash) on Parcel I8-23-6 was completed. In addition, two vibration monitoring units were set up to monitor the two buildings referenced above during the upcoming construction activities in Cells 11 and 12. (See Figure 1 for the locations of the Vibration Monitors)

Construction of an extension of the access road on Parcels I8-24-1 and I8-24-5 was performed. Underground utility installation on Parcel I8-24-5 was completed. Two truckloads of soil materials generated during the construction of the underground utility were transported to the Building 65 stockpile management areas.

Significant access road maintenance activities were required due to the heavy usage over the last seven months of construction activities, the winter sanding of the roads and the spring thaw. Fifteen truckloads of unsuitable road material was removed and transported to the Building 65 stockpile management area. All of the access roads were regarded and the removed material was

replaced with a 6 to 9 inch layer of dense graded material and 2-inch stone to ensure greater stability of the roads. Also, the paved access roads, Lyman Street and the Lyman Street parking lot were swept regularly by using a street sweeper. Jersey barriers were placed adjacent to the access roads along the top of the riverbank as a safety precaution.

Removed three truckloads of sediment from the water treatment system modutanks and transported to the Building 63 stockpile management area. The sediment removed from the tanks was assumed to be TSCA material.

For the month of March a total of seventeen truckloads (170 cy) of non-TSCA material and three truckloads (30cy) of TSCA material were generated during these miscellaneous site preparation and maintenance activities.

Hay bails and filter fabric were placed around catch basins designated by GE in the stockpile management areas and access roads to prevent soils and sediment from entering the basins. Dust control procedures continued for access roads, parking areas, and material storage areas. Staged backfill materials were covered to prevent generation of dust.

3. Sampling/test results received

PCB sample results for the water treatment system sampling program were received for samples collected on March 27, 2003 (Table 5). Non-PCB analytical results were received for the sample collected on February 24, 2003 (Table 5a). Non-PCB analytical results for the WTS samples collected on March 27, 2003 are not available yet. Analytical results for backfill materials are summarized in Table 6. This includes the sampling results for common fill samples collected on February 21, 27 and March 6, 2003; Filter Layer A sample collected on March 6, 2003 and topsoil sample collected on March 10, 2003. The results of the daily particulate air monitoring program are summarized in Table 7. Table 8 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on March 5 are presented in Table 9. PCB and TSS results for water monitoring samples collected on March 19 and 27, 2003 are not available yet. A summary of samples collected for the air sampling conducted on March 28, 2003 are provided in Table 10; however, the PCB data is not available yet. Table 11 contains PCB data associated with equipment confirmatory wipe samples.

4. Diagrams associated with the tasks performed

Figure 1 is a map of the Phase I area, and includes layout of all excavation cells, lot parcel identification numbers, water monitoring locations, PCB air sampling locations, vibration monitoring locations, access road locations, fence line location, the water treatment system pad location, the effluent discharge location, and the utility trench location.

5. Reports received and prepared

No reports were received or prepared during the month of March.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in April 2003

- Complete backfill activities in Cell 10.
- Complete excavation and backfill activities in Cell 10A.
- Complete installation of the Cells 11 and 12 centerline sheetpile wall. Cells 11 and 12 will be extended approximately 100 to 200 feet downstream of the end of Phase I.
- Install the downstream cutoff wall for Cell 12.
- Complete the excavation and backfill activities in Cell 12.
- Initiate the removal of the centerline sheetpile wall located between Cells 9 and 10.
- Transfer TSCA materials from Building 63 to the Building 71 OPCA.
- Transfer non-TSCA materials from Buildings 65 and 68 to the Hill 78 OPCA.
- Initiate the installation of topsoil in Cells 2,3, 4,5,5A.
- Complete the removal of the abandoned underground siphon structures in Cells 9 and 10.
- Complete the removal of the Silver Lake Outfall Extension Structure shoring upon confirmation of the concrete stability.
- Continue stockpile management activities at Buildings 63, 65 and 68.
- Continue operation of water treatment system.
- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), water treatment system sampling (monthly) and backfill material sampling (as needed).

- Start vibration monitoring of 2 structures located on Parcel I8-23-6.

8. Attachments to this report

Table 1. Quantity of Bank and Sediment Material Generated During the Month of March

Table 2. Quantity of Bank and Sediment Material Excavated to Date

Table 3. Quantity of Material Transferred to OPCAs During the Month of March

Table 4. Quantity of Material Transferred to OPCAs to Date

Table 5. NPDES PCB Sampling Results for Water Treatment System

Table 5a. NPDES non-PCB Sampling Results for Water Treatment System

Table 6. Backfill Material Testing Results

Table 7. Daily Air Monitoring Results

Table 8. Daily Water Column Turbidity Monitoring Results

Table 9. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results

Table 10. PCB Air Sampling Results

Table 11. Equipment Confirmatory Wipe Sample Results

Figure 1- Phase I Site Plan

Photodocumentation